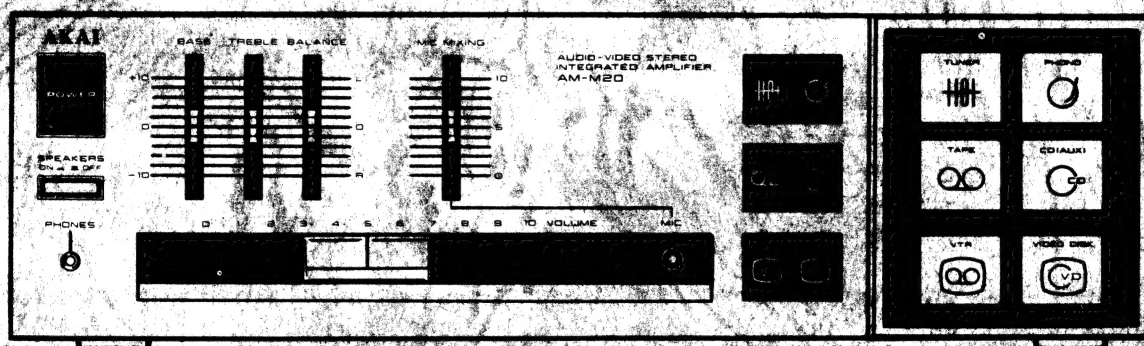


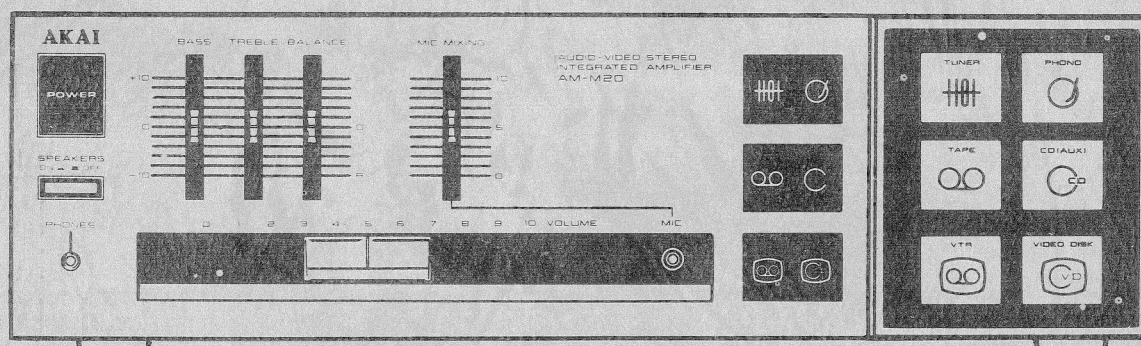
AKAI SERVICE MANUAL



STEREO INTEGRATED AMPLIFIER

MODEL **AM-M20**

AKAI SERVICE MANUAL



STEREO INTEGRATED AMPLIFIER

MODEL **AM-M20**

ABBREVIATIONS FOR SERVICE MANUAL

MODEL AM-M20

ABBREVIATIONS	EXPLANATION
AMP	AMPlifier
AC	Alternate Current
CD	Compact Disc (Player)
DC	Direct Current
EIAJ	Electronic Industries Association of Japan
FTC	Federal Trade Commission
GND	GrouND
IHF	Institute of High Fidelity (Standard)
MIC	MICrophone
OP-AMP	OPerational-AMPlifier
PCB	Printed Circuit Board
REC	RECORD
RIAA	Recording Industry Association of America
SW	SWitch



STEREO INTEGRATED AMPLIFIER

MODEL **AM-M20**

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SECTION 2	PARTS LIST	9

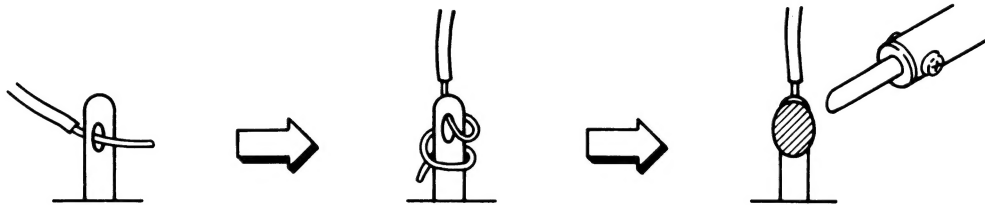
SAFETY INSTRUCTIONS

SAFETY CHECK AFTER SERVICING

Confirm the specified insulation resistance between power cord plug prongs and externally exposed parts of the set is greater than 10 Mohms, but for equipment with external antenna terminals (tuner, receiver, etc.) and is intended for [C] or [A], specified insulation resistance should be more than 2.2 Mohms (ground terminals, microphone jacks, headphone jacks, line-in-out jacks etc.)

PRECAUTIONS DURING SERVICING

1. Parts identified by the \triangle symbol parts are critical for safety.
Replace only with parts number specified.
2. In addition to safety, other parts and assemblies are specified for conformance with such regulations as those applying to spurious radiation. These must also be replaced only with specified replacements.
Examples: RF converters, tuner units, antenna selector switches, RF cables, noise blocking capacitors, noise blocking filters, etc.
3. Use specified internal wiring. Note especially:
 - 1) Wires covered with PVC tubing
 - 2) Double insulated wires
 - 3) High voltage leads
4. Use specified insulating materials for hazardous live parts. Note especially:
 - 1) Insulation Tape
 - 2) PVC tubing
 - 3) Spacers (Insulating Barriers)
 - 4) Insulation sheets for transistors
 - 5) Plastic screws for fixing microswitch (especially in turntable)
5. When replacing AC primary side components (transformers, power cords, noise blocking capacitors, etc.), wrap ends of wires securely about the terminals before soldering.



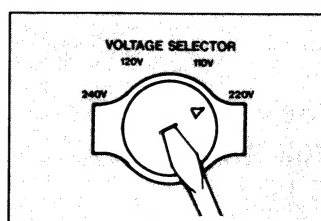
6. Observe that wires do not contact heat producing parts (heatsinks, oxide metal film resistors, fusible resistors, etc.).
7. Check that replaced wires do not contact sharp edged or pointed parts.
8. Also check areas surrounding repaired locations.
9. Use care that foreign objects (screws, solder droplets, etc.) do not remain inside the set.

VOLTAGE CONVERSION

Models for Some Countries are not equipped with this facility. Each machine is preset at the factory according to destination, but some machines can be set to 110V, 120V, 220V, or 240V as required.

If your machine's voltage can be converted:

Before connecting the power cord, turn the VOLTAGE SELECTOR located on the rear panel with a screwdriver until the correct voltage is indicated.



SECTION 1

SERVICE MANUAL

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III.	CONTROLS	6
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VI.	PC BOARD TITLE AND IDENTIFICATIONS	8

For basic adjustments, measuring methods, and operating principles refer to
GENERAL TECHNICAL MANUAL.

I. SPECIFICATIONS

POWER AMPLIFIER SECTION

		8 ohms	6 ohms
RATED POWER OUTPUT	20Hz to 20kHz	40W/0.1%	40W/0.15%
POWER OUTPUT (BY FTC)	20Hz to 20kHz	42W/0.1%	42W/0.15%
	1kHz	43W/0.1%	45W/0.15%
FRENCH NORMAL (8 ohms)	63Hz to 12.5kHz	42W/0.7%	
	1kHz	44W/0.7%	
MUSIC POWER (both channels)		180W	
POWER BANDWIDTH (IHF -3dB, 8 ohms)		10Hz to 50kHz (0.5%)	
S/N (IHF-A)	PHONO	72dB	
	AUX	90dB	
RESIDUAL NOISE (8 ohms)		0.5mV	
CHANNEL SEPARATION (IHF,1kHz)		55dB	
DAMPING FACTOR (1kHz, 8 ohms)		30	
REQUIRED SPEAKER IMPEDANCE		6 to 16 ohms	

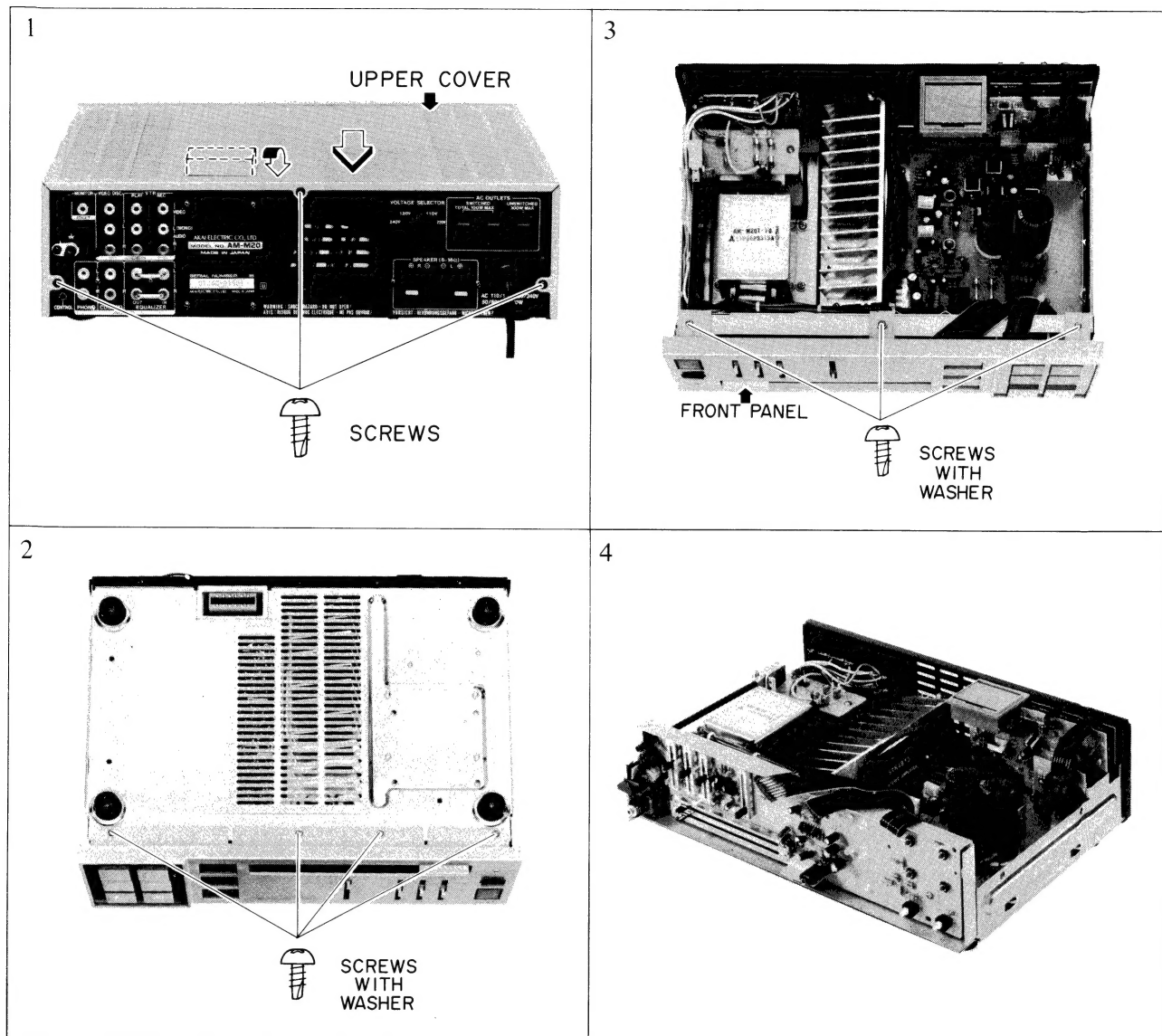
PRE AMPLIFIER SECTION

INPUT SENSITIVITY/IMPEDANCE		
	PHONO	2.5mV/47kohms
	AUX	150mV/47kohms
	TUNER	150mV/47kohms
	TAPE	150mV/47kohms
OUTPUT LEVEL/IMPEDANCE	TAPE REC	150mV/1kohms
FREQUENCY RESPONSE		
	PHONO (riaa deviation)	±0.5dB
	TUNER, AUX, TAPE	5Hz to 100kHz (-3dB)
	VTR	5Hz to 30kHz (-3dB)
TONE CONTROL		
	BASS	±8dB
	TREBLE	±8dB
PHONO MAX. INPUT LEVEL		150mV
POWER REQUIREMENTS		120V, 60Hz for USA & Canada 220V, 50Hz for Europe except UK 240V, 50Hz for UK & Australia 110V/120V/220V/240V, 50Hz/60Hz convertible for other countries
DIMENSIONS		350(W) × 100(H) × 254(D) mm (13.8 × 3.9 × 10 inches)
WEIGHT		5.7kg (12.5 lbs)

* For improvement purposes, specifications and design are subject to change without notice.

II. DISMANTRING OF UNIT

In case of trouble, etc. necessitating dismantling, please dismantle in the order shown in the photographs. Reassemble in reverse order.



III. CONTROLS

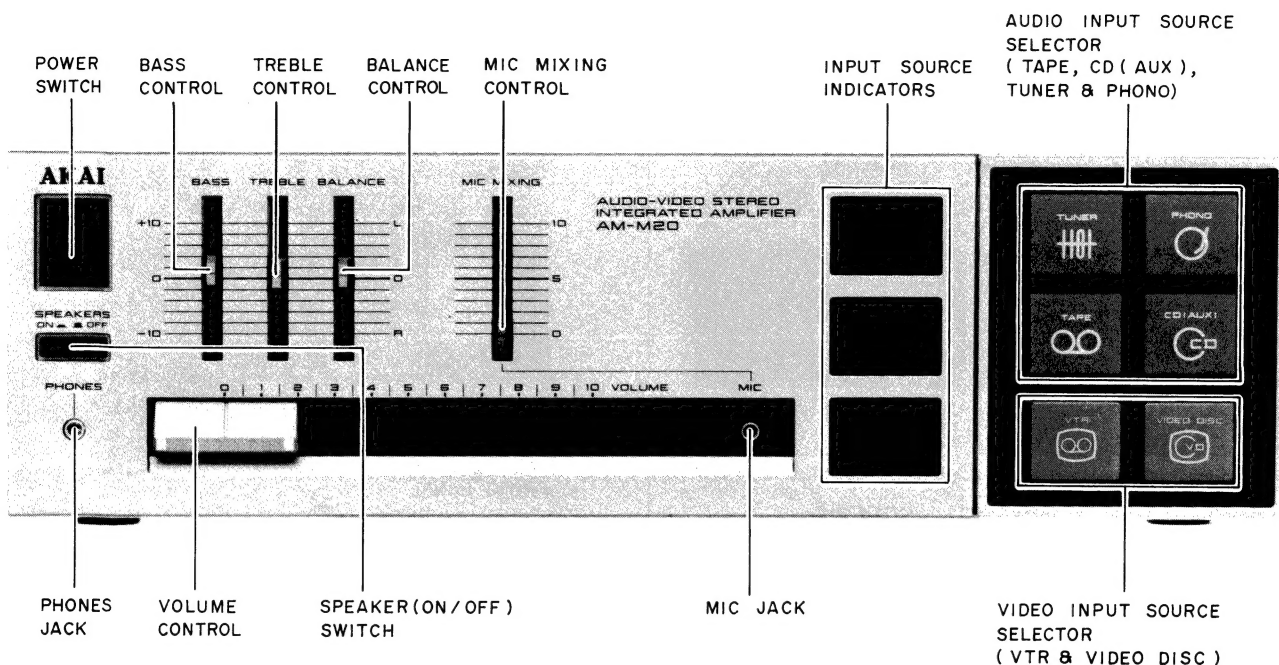


Fig. 3-1 Front View

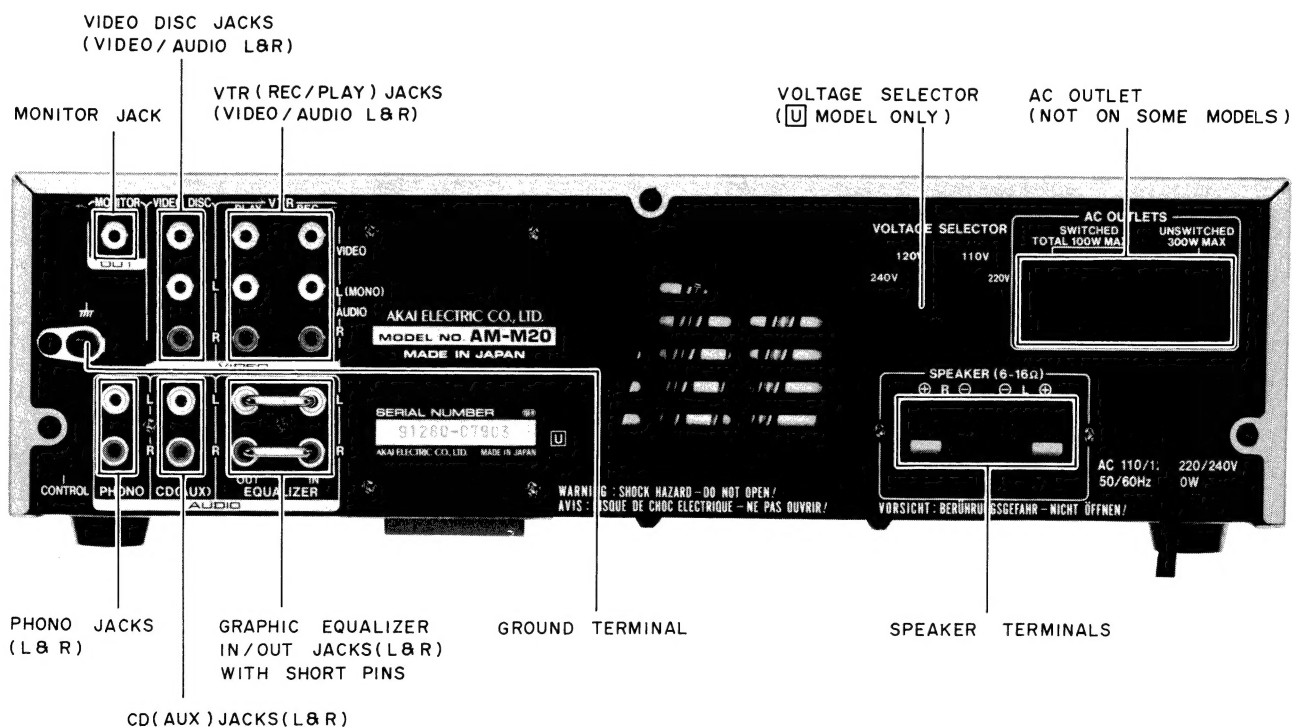


Fig. 3-2 Rear View

IV. PRINCIPAL PARTS LOCATION

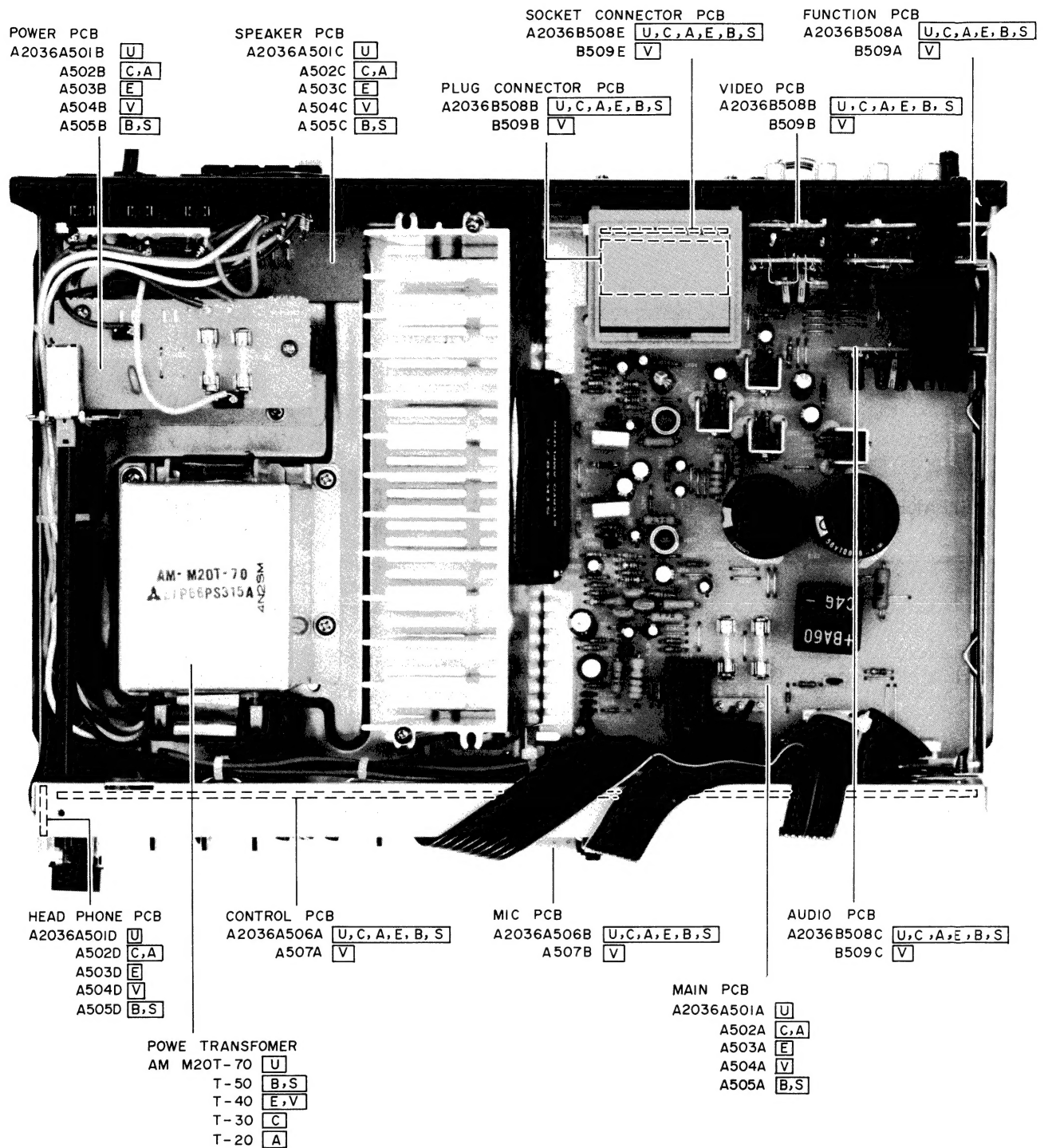


Fig. 4-1 Top View

V. ADJUSTMENT

No Adjustment is Necessary for this model.

VI. PC BOARD TITLE AND IDENTIFICATIONS

PC BOARD TITLE		PC BOARD NUMBER	REMARKS
MAIN	PC BOARD	A2036A501A	U
		502A	C, A
		503A	E
		504A	V
		505A	B, S
POWER SW	PC BOARD	A2036A501B	U
		502B	C, A
		503B	E
		504B	V
		505B	B, S
SPEAKER	PC BOARD	A2036A501C	U
		502C	C, A
		503C	E
		504C	V
		505C	B, S
HEAD PHONE	PC BOARD	A2036A501D	U
		502D	C, A
		503D	E
		504D	V
		505D	B, S
CONTROL	PC BOARD	A2036A506A	U, C, A, E, B, S
		507A	V
MIC	PC BOARD	A2036A506B	U, C, A, E, B, S
		507B	V
FUNCTION	PC BOARD	A2036B508A	U, C, A, E, B, S
		509A	V
VIDEO	PC BOARD	A2036B508B	U, C, A, E, B, S
		509B	V
AUDIO	PC BOARD	A2036B508C	U, C, A, E, B, S
		509C	V
PLUG CONNECTOR	PC BOARD	A2036B508D	U, C, A, E, B, S
		509D	V
SOCKET CONNECTOR	PC BOARD	A2036B508E	U, C, A, E, B, S
		509E	V

SECTION 2

PARTS LIST

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7. SPEAKER PC BOARD	13
8. MIC PC BOARD	13
9. HEAD PHONE BOARD	13
10. POWER SW PC BOARD	13
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Resistor and Capacitor which is not listed in this parts list, please refer to
COMMON LIST FOR SERVICE PARTS.

ATTENTION

1. When placing an order for parts, be sure to list the parts no., model no., and description of each part. If any of this information is omitted, there are instances in which parts cannot be shipped or the wrong parts will be delivered.
2. Please be careful not to make a mistake in the parts no. If the parts no. is in error, a part different from the one ordered may be delivered.
3. Because part numbers and part definitions and supply in the Preliminary Parts List may have been the subject of changes, please use this parts list for all future reference.

HOW TO USE THIS PARTS LIST

1. This Parts List shows those parts which are considered necessary for repairs. Other parts, such as resistors and capacitors, are shown in the "Common List for Service Parts" from which these parts should be selected and parts.
2. The Recommended Spare Parts List shows those parts in the Parts List which are considered particularly important for service.
3. Parts not shown in the Parts List and "Common List for Service Parts" will not in principle be supplied.
4. How to read the parts list

a) Mechanism Block

b) P.C Board Block

2. HEAD BASE BLOCK

REF. NO.	PART NO.	DESCRIPTION
2-1 x	BH-T2023A320A	HEAD BASE BLOCK GX-F66R
2-2	HP-H2206A010A	HEAD R/P PR4-8FU C
2-3	ZS-477876	PAN20×03STL CMT
2-4	ZS-536488	BID20×08STL CMT
2-5	ZG-402895	CS ANGLE ADJUST SPRING

SP (Service Parts) Classification

A small "x" indicates the inability to show that particular part in the Photo or Illustration.

This number corresponds with the individual parts index number in that figure

This number corresponds with the Figure Number

6. SYS. CON. P C BOARD BLOCK

REF. NO.	PART NO.	DESCRIPTION
6-1	BA-T2034A070A	PC SYS CON BLK GX-F44R
6-IC1	EI-324536	IC HD14049BP
6-IC2	EI-336801	IC MB8841-564M
6-IC3	EI-331661	IC SN7405N
6-IC4	EI-336725	IC M54527P
6-TR1to4	ET-200985	TR 2SC2603 F,G
6-TR5to28	ET-554657	TR 2SA733A P,Q
6-D1	ED-318292	D SILICON H 1S2473T-77 T2 6
6-D2to4	ED-308952	D GERMA V 1K34A-LR F07
6-D5to10	ED-318292	D SILICON H 1S2473T-77 T2 6
6-X1	EI-318384	OSC X'TAL NC-18C 3.579545MHZ

SP (Service Parts) Classification

These reference symbols correspond with component symbols in the Schematic Diagrams.

5. The kind of part and its installation position can both be determined by the Part Number. To determine where a part number is listed, utilize the Parts Index at the end of the Parts List. It is necessary first of all to find the Part Number. This can be accomplished by using the Reference Number listed at the right of the part number in the Parts Index.

WARNING

⚠ INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURE'S RECOMMENDED PARTS

AVERTISSEMENT

⚠ IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE FABRICANT

RECOMMENDED SPARE PARTS

Because, if the parts listed below are on hand, almost any repair can be accomplished, we suggest that you stock these Recommended Spare Parts Items.

REF. NO.	PART NO.	DESCRIPTION
1 N	BT-356638	△ TRANS POWER AM-M20T-20 [A]
2 N	BT-356637	△ TRANS POWER AM-M20T-30 [C]
3 N	BT-356639	△ TRANS POWERAM-M20T-40 [E,V]
4 N	BT-356640	△ TRANS POWER AM-M20T-50 [B,S]
5 N	BT-356636	△ TRANS POWER AM-M20T-70 [U]
6	ED-349656	D LED AY5505S
7	ED-350748	D SILICON DBA60C-K15
8	ED-348990	D SILICON H DS446
9	ED-301911	D SILICON H DS448
10	ED-344280	D SILICON H GMA-01-FY2 F05
11	ED-346613	D ZENER H HZ11 C3
12	ED-343996	D ZENER H HZ12 B1
13	ED-306320	D ZENER H HZ15 2
14	ED-329449	D ZENER H HZ18 3
15	ED-331198	D ZENER H HZ3 A1
16	ED-337268	D ZENER H HZ5 A1
17	ED-306824	D ZENER H HZ7L B
18	EF-306950	△ FUSE TSC A 250V 2.00A [U]
19	EF-200952	△ FUSE TSC A 250V 6.30A [U]
20	EF-346115	△ FUSE TSC 125V 6.30A [C,A]
21	EF-323080	△ FUSE TSC 125V 3.15A [C,A]
22	EF-249851	△ FUSE SEMKO T 5.00A 250V [E,V,B,S]
23	EF-601301	△ FUSE SEMKO T 2.00A 250V [E,V,B,S]
24 N	EI-354401	IC BU4066B
25	EI-353852	IC LA7016
26 N	EI-356656	IC LC4066
27 N	EI-356655	IC LC7815
28	EI-337228	IC M5218L0
29	EI-349719	IC M5218P
30	EI-344764	IC M5218P-21
31 N	EI-356652	IC STK4873
32	EJ-351021	SOCKET CONNECTER M1701 12P
33	EJ-356521	SOCKT CONNECTER-B M1701-A 12P
34	EQ-337159	RELAY POW G4Z-2282P 2N0 24V
35	ER-328278	△ R FUSE ERD2FC 1/4W 10R0G
36	ES-349070	△ SW SELECTOR YKS11-0002 02-4 [U]
37 N	ES-356631	SW PUSH ESB62772 2-02-02S
38	ES-347966	SW PUSH ESB-649 01-2-2N
39	ES-337902	SW PUSH SDLD1P002 01-1
40	ES-349474	SW TACT SKHHAD035A
41	ET-308472	TR 2SA1115 E,F,G
42 N	ET-353899	TR 2SA1317 S,T,U
43 N	ET-201800	TR 2SA970 BL
44	ET-322598	TR 2SB632K E,F
45	ET-307195	TR 2SC2240 GR,BL
46	ET-308141	TR 2SC2603 G
47 N	ET-353898	TR 2SC3330
48	ET-349081	TR 2SC3383 S,T
49	ET-310148	TR 2SD612K E,F
50	ET-200986	TR 2SD863-V8 F
51 N	EV-356632	VR SLIDE 100P2WV0B A104
52	EV-349402	VR SLIDE 30P1SV0C B503
53 N	EV-356633	VR SLIDE 30P2SV0F C104
54	EV-349655	VR SLIDE 30P2SV0E MN104

“NOTE” N: New Parts

SYMBOL FOR DESTINATION

- [A]: AAL (U.S.A.)
- [B]: UK (England)
- [C]: CSA (Canada)
- [E]: CEE (Europe)
- [S]: SAA (Australia)
- [U]: U/T (Universal Area)
- [V]: VDE (West Germany)

1. PC BOARD BLOCK

REF. NO.	PART NO.	DESCRIPTION
1-1A	BA-A2036A020A	PC MAIN BLK AM-M20 (U)
1-1B	BA-A2036A020B	PC MAIN ELK AM-M20 (C,A)
1-1C	BA-A2036A020C	PC MAIN BLK AM-M20 (E)
1-1D	BA-A2036A020D	PC MAIN BLK AM-M20 (V)
1-1E	BA-A2036A020E	PC MAIN BLK AM-M20 (B,S)
1-2A	BA-A0036A040A	PC FUNCTION BLK AM-M20 (U) [EXCEPT V]
1-2B	BA-A2036A040B	PC FUNCTION BLK AM-M20 (V) [V]
1-3A	BA-A2036A040A	PC CONTROL BLK AM-M20 (U) [EXCEPT V]
1-3B	BA-A2036A030B	PC CONTROL BLK AM-M20 (V) [V]

NOTE: (1) PC MAIN BLK consists of following PC BOARDS.

- MAIN PC BOARD
- SPEAKER PC BOARD
- HEAD PHONE PC BOARD
- POWER SW PC BOARD

(2) PC FUNCTION BLK consists of following PC BOARDS.

- FUNCTION PC BOARD
- VIDEO PC BOARD
- AUDIO PC BOARD

(3) PC CONTROL BLK consists of following PC BOARDS.

- CONTROL PC BOARD
- MIC PC BOARD

2. MAIN PC BOARD

REF. NO.	PART NO.	DESCRIPTION
----------	----------	-------------

MAIN PC BOARD

2-1C201	EI-356652	△ IC STK4873
2-TR201	ET-307195	TR 2SC2240 GR,BL
2-TR202,		
TR203	ET-353898	TR 2SC3330
2-TR204	ET-200986	TR 2SD863-V8 F
2-TR205	ET-310148	△ TR 2SD612K E,F
2-TR206	ET-322598	△ TR 2SB632K E,F
2-TR207	ET-310148	△ TR 2SD612K E,F
2-TR208	ET-322598	△ TR 2SB632K E,F
2-TR209	ET-353899	△ TR 2SA1317 S,T,U
2-TR210	ET-201800	TR 2SA970 BL
2-D201	ED-301911	D SILICON H DS448
2-D202,		
D203	ED-348990	D SILICON H DS446
2-D204	ED-337268	D ZENER H HZ5 A1
2-D205	ED-301911	D SILICON H DS448
2-D206	ED-348990	D SILICON H DS446
2-D207	ED-329449	△ D ZENER H HZ18 3
2-D208	ED-306320	D ZENER H HZ15 2
2-D209	ED-343996	△ D ZENER H HZ12 B1
2-D210	ED-346613	D ZENER H HZ11 C3
2-D211	ED-306824	D ZENER H HZ7L B
2-D212	ED-350748	△ D SILICON DBA60C-K15
2-L1	EO-338420	COIL FIX 2 FL12R202E 202K [V]
2-L2,L3	EO-336934	COIL FIX 1 LAL03KH 2R2M [V]
2-L201	EO-337878	COIL FIX 2 201AK-007 2R2K
2-RL201	EQ-337159	△ RELAY POW G4Z-2282P 2N0 24V
2-FR27	ER-328278	△ R FUSE ERD2FC 1/4W 10R0G
2-R206	ER-358909	△ R OMF H S10 FS RSM 1/2W 332 J
2-R207	ER-358606	△ R OMF H S10 FS RSM 1/2W 102 J
2-R208	ER-349423	△ R FUSE ERD2FC S10 1/4W 5600G
2-R209	ER-200746	△ R FUSE ERD2FC 1/4W 1000G
2-R210	ER-347610	R CT P F09 PLATE 3W R22K
2-R213	ER-352651	R OMF H S15 FS 1W 4R7J
2-R214	ER-337754	R OMF H S15 FS 1W 100J
2-R218	ER-333067	R OMF H S20 FS 2W 821J
2-R222	ER-347962	R OMF H S15 FS 1W 152J
2-R224	ER-356747	△ R OMF H S15 FS 1W 820J
2-R225	ER-358022	△ R OMF H S20 FS 2W 820J
2-R226	ER-328082	R CB H S10 FS RDS 1/4W 332J
2-R228	ER-322591	△ R CB H S10 FS RDS 1/4W 101J
2-R229	ER-323075	R CB H S10 FS RDS 1/4W 472J
2-R231	ER-322591	R CB H S10 FS RDS 1/4W 101J
2-R232	ER-658034	△ R OMF H FS 2W 221J
2-R233	ER-328082	R CB H S10 FS RDS 1/4W 332J
2-R236	ER-323075	R CB H S10 FS RDS 1/4W 472J
2-R243	ER-322591	△ R CB H S10 FS RDS 1/4W 101J
2-C215	EC-334012	C EC V CUT NP SM 221M 6.3DC
2-C219	EC-343393	△ C EC V CUT SM 103M 50.0DC
2-C222	EC-343393	△ C EC V CUT SM 103M 50.0DC
2-C225	EC-326583	C MMY V CUT CF921 473K 400DC
2-J1	EJ-336905	PIN J AJC-035-ACB P 4P
2-J2	EJ-356651	PHONE J HSJ1011-01-510
2-J9	EJ-336905	PIN J AJC-035-ACB P 4P

ASSEMBLY BLOCK

2-F3A	EF-200952	△ FUSE TSC A 250V 6.30A [U]
2-F3B	EF-346115	△ FUSE TSC 125V 6.30A [C,A]
2-F3C	EF-249851	△ FUSE SEMKO T 5.00A 250V [E,V,B,S]
2-F4A	EF-200952	△ FUSE TSC A 250V 6.30A [U]
2-F4B	EF-346115	△ FUSE TSC 125V 6.30A [C,A]
2-F4C	EF-249851	△ FUSE SEMKO T 5.00A 250V [E,V,B,S]

3. CONTROL PC BOARD

REF. NO.	PART NO.	DESCRIPTION
3-IC101, .		
IC102	EI-337228	IC M5218L0
3-TR101	ET-349081	TR 2SC3383 S,T
3-TR102	ET-308141	TR 2SC2603 G
3-D101		
to D106	ED-349656	D LED AY5505S
3-SW101		
to SW104	ES-349474	SW TACT SKHHAD035A
3-SW105,		
SW106	ES-347966	SW PUSH ESB-649 01-2-2 N
3-VR101	EV-349402	VR SLIDE 30P1SV0C B503
3-VR102	EV-356632	VR SLIDE 100P2WV0B A104
3-VR103	EV-349655	VR SLIDE 30P2SV0E MN104
3-VR104,		
VR105	EV-356633	VR SLIDE 30P2SV0F C104

4. FUNCTION PC BOARD

REF. NO.	PART NO.	DESCRIPTION
4-IC1	EI-344764	IC M5218P-21
4-IC2	EI-349719	IC M5218P
4-IC3	EI-356655	IC LC7815
4-IC4	EI-354401	IC BU4066B
4-TR1	ET-308472	TR 2SA1115 E,F,G
4-TR6		
to TR12	ET-308141	TR 2SC2603 G
4-D1		
to D3	ED-301911	D SILICON H DS448
4-D4	ED-344280	D SILICON H GMA-01-FY2 F05
4-D6		
to D9	ED-344280	D SILICON H GMA-01-FY2 F05
4-D10	ED-331198	D ZENER H HZ3 A1
4-L4,L5	EO-336934	COIL FIX 1 LAL03KH 2R2M [V]
4-R1,R2	ER-200939	△ R CB H S10 FS RDS 1/4W 181J
4-R8	ER-200939	△ R CB H S10 FS RDS 1/4W 181J
4-R22	ER-200939	△ R CB H S10 FS RDS 1/4W 181J
4-C10	EC-344157	C DOUBLE LAYER 473Z 5.5DC

5. VIDEO PC BOARD

REF. NO.	PART NO.	DESCRIPTION
5-IC7	EI-353852	IC LA7016
5-TR2		
to TR5	ET-308141	TR 2SC2603 G
5-D5	ED-301911	D SILICON H DS448
5-L6		
to L8	EO-336934	COIL FIX 1 LAL03KH 2R2M [V]
5-R56,		
R57	ER-322591	R CB H S10 FS RDS 1/4W 101J
5-R71	ER-316802	R CB H S10 FS RDS 1/4W 471J
5-J2	EJ-356658	PIN J 1T-31K0425 10P

6. AUDIO PC BOARD

REF. NO.	PART NO.	DESCRIPTION
6-IC5,IC6	EI-356656	IC LC4066

7. SPEAKER PC BOARD

REF. NO.	PART NO.	DESCRIPTION
7-L201	EO-342936	COIL BALUN [V]
7-TM201	EJ-349417	TERMINAL LEVER YKD21-0026 4P

8. MIC PC BOARD

REF. NO.	PART NO.	DESCRIPTION
8-J101	EJ-356634	PHONE J HSJ3064-01-460
8-L1	EO-338420	COIL FIX 2 FL12R202E 202K [V]

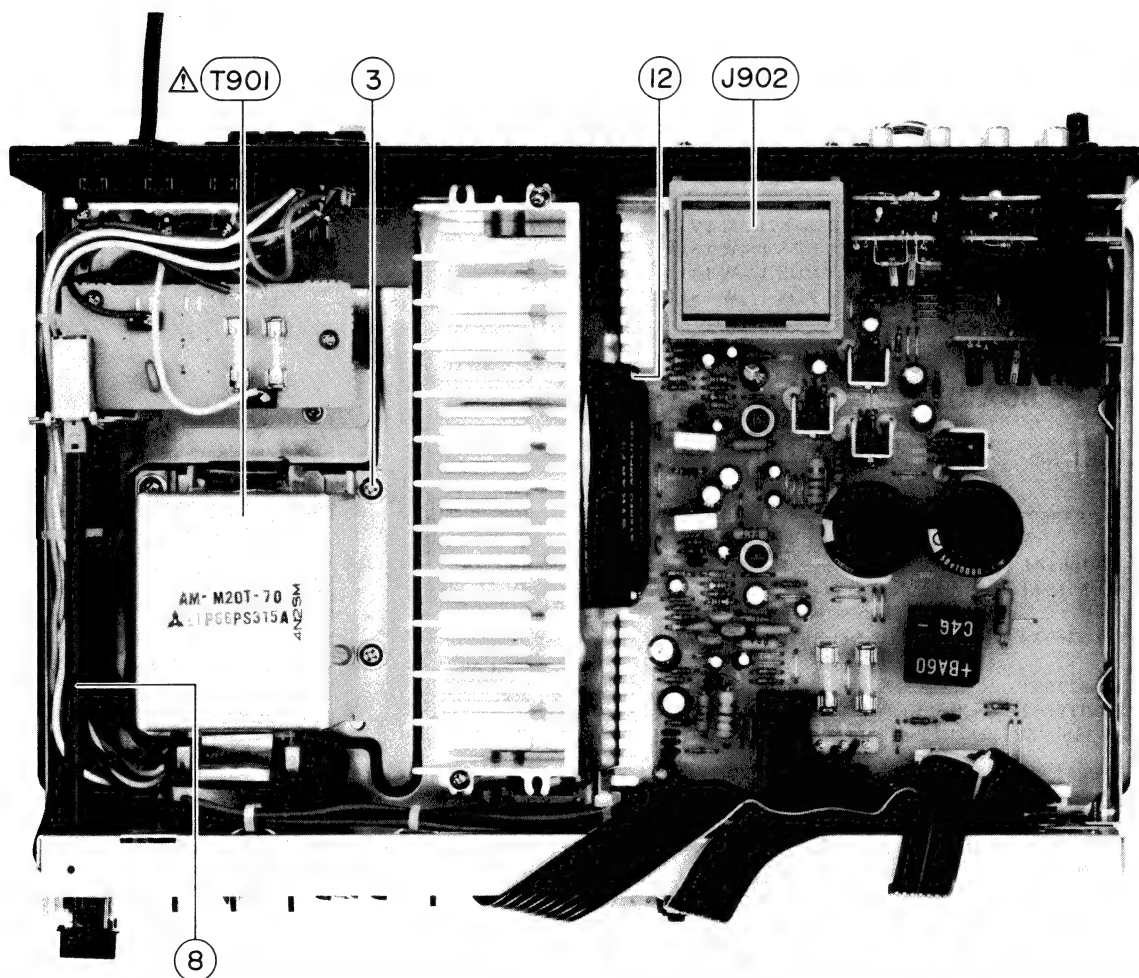
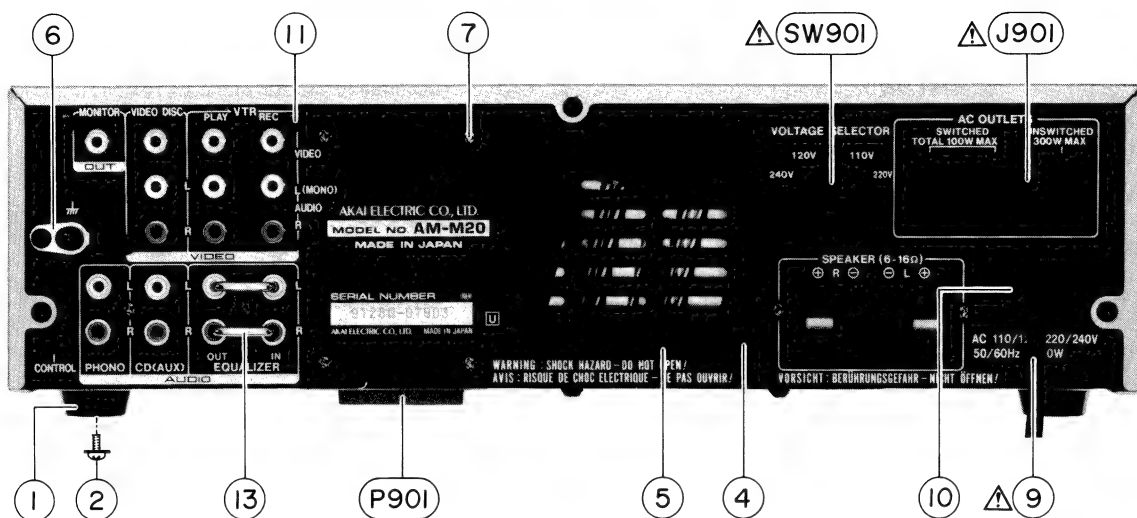
9. HEAD PHONE PC BOARD

REF. NO.	PART NO.	DESCRIPTION
9-SW201	ES-356631	SW PUSH ESB62772 2-02-02S
9-L201	EO-336934	COIL FIX 1 LAL03KH 2R2M [V]
9-R201	ER-358910	R OMF H S15 FS 2W 181J
9-J201	EJ-349658	PHONE J 2P HSJ0922-040 3.5 T

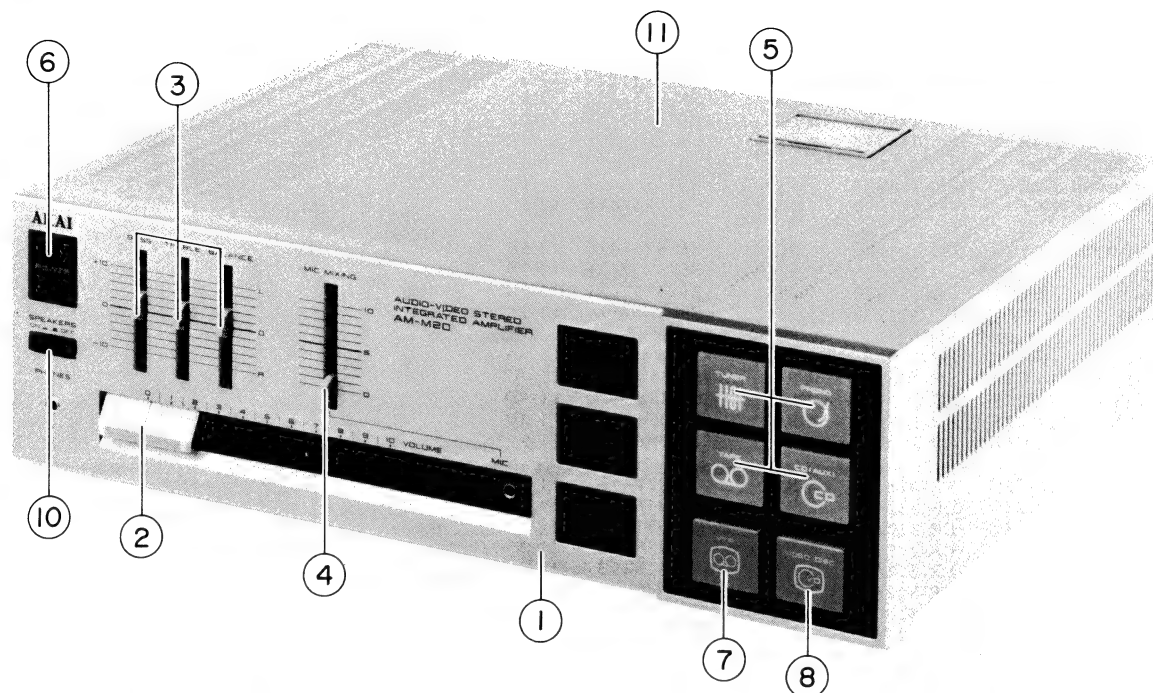
10. POWER SW PC BOARD

REF. NO.	PART NO.	DESCRIPTION
POWER SW PC BOARD		
10-SW1	ES-337902	△ SW PUSH SDLD1P002 01-1
10-L1	EO-338409	COIL LF FK0B160MH02 250UH [V]
10-C1A	EC-320548	△ C CE V F 103Z 250AC [U]
10-C1B	EC-338411	△ C CE V FZ 103P 400AC [C,A]
10-C1C	EC-338496	△ C CE V FZ 472P 400AC [E,V,B,S]
ASSEMBLY BLOCK		
10-F1A	EF-306950	△ FUSE TSC A 250V 2.00A [U]
10-F1B	EF-323080	△ FUSE TSC 125V 3.15A [C,A]
10-F1C	EF-601301	△ FUSE SEMKO T2.00A 250V [E,V,B,S]
10-F2	EF-306950	△ FUSE TSC A 250V 2.00A [U]

ASSEMBLY BLOCK



FINAL ASSEMBLY BLOCK



11. ASSEMBLY BLOCK

REF. NO.	PART NO.	DESCRIPTION
11-1	SA-202118	FOOT
11-2	ZS-498273	T2BR30X08STL CMT PW080
11-3	ZS-346742	ST B1D40X08STL CMT CUP
11-4A	SP-356601E	PANEL REAR AM-M20 (U)
11-4B	SP-356601H	PANEL REAR AM-M20 (C,A)
11-4C	SP-356601F	PANEL REAR AM-M20 (E,V)
11-4D	SP-356601G	PANEL REAR AM-M20 (B,S)
11-5	ZS-308846	T2BR30X08STL BZN PROJECTION
11-6	EJ-329610	TERMINAL W/SCREW UB-0067 L 1P
11-7	ZS-351886	PT BR30X10STL BNI
11-8	MZ-356607	JOINT (C)
11-9A	EW-354515	△ AC CORD 2 CORES KP-700A, VFF-CB U/T [U]
11-9B	EW-349427	△ AC CORD 2 CORES KP-8W, SPT-2 UC [C]
11-9C	EW-349428	△ AC CORD 2 CORES KP-8W, SPT-1 UC [A]
11-9D	EW-358028	△ AC CORD 2 CORES KP-419C, LTCE-2F EV [E,V]
11-9E	EW-358029	△ AC CORD 2 CORES LTBS-2F-CB B [B]
11-9F	EW-358030	△ AC CORD 2 CORES KP-560, LTSA2F-CB S [S]
11-10	EZ-631945	STRAIN RELIEF SR-4N-4 [C,A]
11-11	EW-698308	RV NYL30X055 BL
11-12	ZS-321279	T2BR30X18STL CMT
11-13	EJ-348218	PLUG SHORT PIN P2138
11-T901A	BT-356636	△ TRANS POWER AM-M20T-70 [U]
11-T901B	BT-356637	△ TRANS POWER AM-M20T-30 [C]
11-T901C	BT-356638	△ TRANS POWER AM-M20T-20 [A]
11-T901D	BT-356639	△ TRANS POWER AM-M20T-40 [E,V]
11-T901E	BT-356640	△ TRANS POWER AM-M20T-50 [B,S]
11-SW901	ES-349070	△ SW SELECTOR YKS11-0002 02-4 [U]
11-J901A	EJ-337405	△ SOCKET OUTLET S2T733T164 JUC 3X2P [U]
11-J901B	EJ-352642	△ SOCKET OUTLET S2T733T114T [C,A]
11-P901	EJ-350918	PLUG CONNECTER M1690 12P
11-P901B	EJ-356522	PLUG CONNECTER-B M1690-A 12P
11-J902	EJ-351021	SOCKET CONNECTER M1701 12P
11-J902B	EJ-356521	SOCKET CONNECTER-B M1701-A 12P

12. FINAL ASSEMBLY BLOCK

REF. NO.	P PART NO.	DESCRIPTION
PANEL FRONT BLOCK		
12-1	BD-A2036A050A	PANEL FRONT BLK AM-M20
12-1B	BD-A2036A050B	PANEL FRONT BLK AM-M20-B
12-2	SK-B356613	KNOB (C) PART
12-2B	SK-B356613B	KNOB (C)-B PART
12-3	SK-B356615	KNOB (D)-1 PART
12-4	SK-B356615B	KNOB (D)-2 PART
12-5	SK-356641B	KNOB OPERATION-S
12-5B	SK-356641C	KNOB OPERATION-B
12-6	SK-343017F	KNOB POWER-B
12-7	SK-356618Q	KNOB (A)-S VTR
12-7B	SK-357765E	KNOB (A)-B VTR
12-8	SK-356618R	KNOB (A)-S VIDEO DISK
12-8B	SK-357765F	KNOB (A)-B VIDEO DISK

FINAL ASSEMBLY BLOCK		
12-9x	ZS-498273	T2BR30X08STL CMT PW080 [PANEL FRONT FIX]
12-10	SK-356619B	KNOB (B)-S
12-11	SP-350869	COVER UPPER
12-11B	SP-350869E	COVER UPPER (C)-B

NOTE: PANEL FRONT BLK consists of 12-2, 12-3, 12-4, 12-5, 12-6, 12-7, and 12-8.

SYMBOL FOR COLOR VARIATION

NON : STANDARD COLOR

B or BL : BLACK

INDEX

PART NO.	REF. NO.	PART NO.	REF. NO.	PART NO.	REF. NO.	PART NO.	REF. NO.	PART NO.	REF. NO.
BA-A2036A020A	1-1A	EJ-346651	2-J2	SA-202118	11-1				
BA-A2036A020B	1-1B	EJ-356658	5-J2	SK-B356613	12-2				
BA-A2036A020C	1-1C	EO-336934	2-L2	SK-B356613B	12-2B				
BA-A2036A020D	1-1D	EO-336934	2-L3	SK-B356615	12-3				
BA-A2036A020E	1-1E	EO-336934	4-L4	SK-B356615B	12-4				
BA-A2036A030A	1-3A	EO-336934	4-L5	SK-343017F	12-6				
BA-A2036A030B	1-3B	EO-336934	5-L6	SK-356618Q	12-7				
BA-A2036A040A	1-2A		to L8	SK-356618R	12-8				
BA-A2036A040B	1-2B	EO-336934	9-L201	SK-356619B	12-10				
BD-A2036A050A	12-1	EO-337878	2-L201	SK-356641B	12-5				
BD-A2036A050B	12-1B	EO-338409	10-L1	SK-356641C	12-5B				
BT-356636	11-T901A	EO-338420	2-L1	SK-357765E	12-7B				
BT-356637	11-T901B	EO-338420	8-L1	SK-357765F	12-8B				
BT-356638	11-T901C	EO-342936	7-L201	SP-350869	12-11				
BT-356639	11-T901D	EQ-337159	2-RL201	SP-350869E	12-11B				
BT-356640	11-T901E	ER-200746	2-R209	SP356601E	11-4A				
EC-320548	10-C1A	ER-200939	4-R1	SP-356601F	11-4C				
EC-326583	2-C225	ER-200939	4-R2	SP-356601G	11-4D				
EC-334012	2-C215	ER-200939	4-R8	SP-356601H	11-4B				
EC-338411	10-C1B	ER-200939	4-R22	ZS-308846	11-5				
EC-338496	10-C1C	ER-316802	5-R71	ZS-321279	11-12				
EC-343393	2-C219	ER-322591	2-R243	ZS-346742	11-3				
EC-343393	2-C222	ER-322591	2-R228	ZS-351886	11-7				
EC-344157	4-C10	ER-322591	2-R231	ZS-498273	11-2				
ED-301911	2-D205	ER-322591	5-R56	ZS-498273	12-9x				
ED-301911	2-D201	ER-322591	5-R57	ZW-698308	11-11				
ED-301911	4-D1	ER-323075	2-R236						
	to D3	ER-323057	2-R229						
ED-301911	5-D5	ER-328082	2-R233						
ED-306320	2-D208	ER-328082	2-R226						
ED-306824	2-D211	ER-328278	2-FR27						
ED-329449	2-D207	ER-333067	2-R218						
ED-331198	4-D10	ER-337754	2-R214						
ED-337268	2-D204	ER-347610	2-R210						
ED-343996	2-D209	ER-347962	2-R222						
ED-344280	4-D4	ER-349423	2-R208						
ED-344280	4-D6	ER-352651	2-R213						
	to D9	ER-356747	2-R224						
ED-346613	2-D210	ER-358022	2-R225						
ED-348990	2-D203	ER-358606	2-R207						
ED-348990	2-D206	ER-358909	2-R206						
ED-348990	2-D202	ER-358910	9-R201						
ED-349656	3-D101	ER-658034	2-R232						
	to D104	ES-337902	10-SW1						
ED-349656	3-D106	ES-347966	3-SW105						
ED-349656	3-D105	ES-347966	3-SW106						
ED-350748	2-D212	ES-349070	11-SW901						
EF-200952	2-F3A	ES-349474	3-SW101						
EF-200952	2-F4A		to SW104						
EF-249851	2-F3C	ES-356631	9-SW201						
EF-249851	2-F4C	ET-200986	2-TR204						
EF-306950	10-F1A	ET-201800	2-TR210						
EF-306950	10-F2	ET-307195	2-TR201						
EF-323080	10-F1B	ET-308141	3-TR102						
EF-346115	2-F3B	ET-308141	4-TR6						
EF-346115	2-F4B		to TR12						
EF-601301	10-F1C	ET-308141	5-TR2						
EI-337228	3-IC101		to TR5						
EI-337228	3-IC102	ET-308472	4-TR1						
EI-344764	4-IC1	ET-310148	2-TR205						
EI-349719	4-IC2	ET-310148	2-TR205						
EI-353852	5-IC7	ET-322598	2-TR206						
EI-354401	4-IC4	ET-322598	2-TR208						
EI-356652	2-IC201	ET-399081	3-TR101						
EI-356655	4-IC3	ET-353898	2-TR202						
EI-356656	6-IC5	ET-353898	2-TR203						
EI-356656	6-IC6	ET-353899	2-TR209						
EJ-329610	11-6	EV-349402	3-VR101						
EJ-336905	2-J1	EV-349655	3-VR103						
EJ-336905	2-J9	EV-356632	3-VR102						
EJ-337405	11-J901A	EV-356633	3-VR104						
EJ-348218	11-13	EV-356633	3-VR105						
EJ-349417	7-TM201	EW-349427	11-9B						
EJ-349658	9-J201	EW-349428	11-9C						
EJ-350918	11-P901	EW-354515	11-9A						
EJ-351021	11-J902	EW-358028	11-9D						
EJ-352642	11-J901B	EW-358029	11-9E						
EJ-356521	11-J902B	EW-358030	11-9F						
EJ-356522	11-P901B	EZ-631945	11-10						
EJ-356634	8-J101	MZ-356607	1-8						

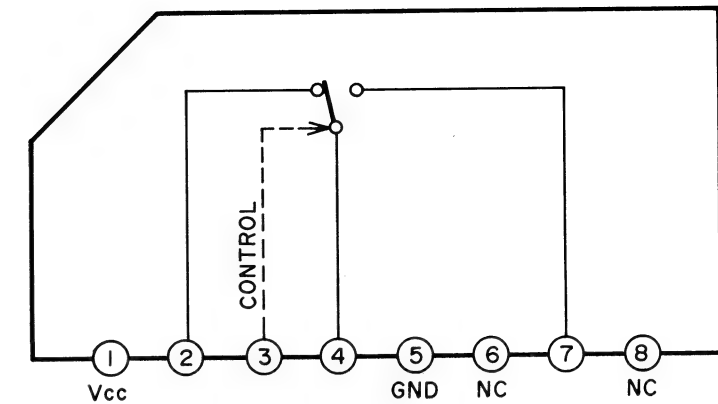
AKAI

MODEL AM-M20

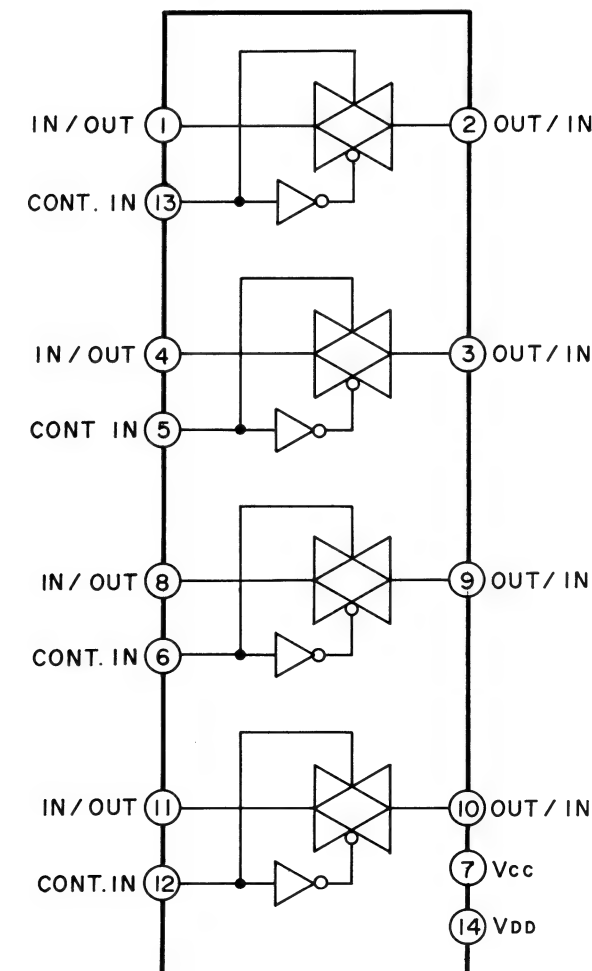
PC BOARDS SCHEMATIC DIAGRAM

1. BLOCK DIAGRAM OF IC's 1
2. AM-M20 SCHEMATIC DIAGRAM 2
3. MAIN PCB, SPEAKER PCB, HEADPHONE PCB, POWER SW PCB 3
4. FUNCTION PCB, AUDIO PCB, VIDEO PCB, CONTROL PCB 4

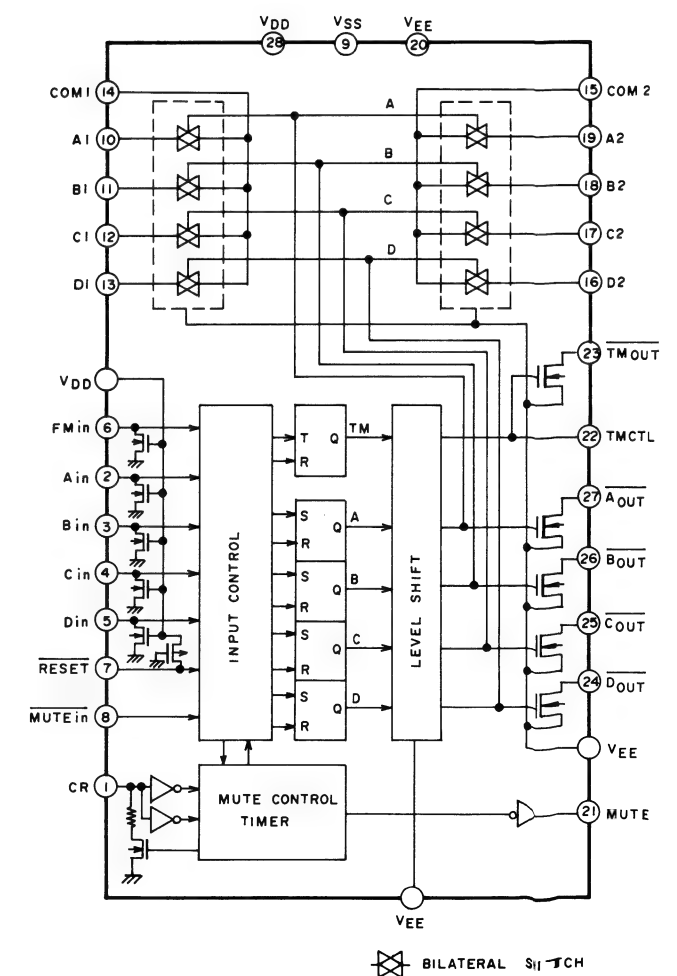
LA7016



LC4066



LC7815



AM-M20

FUNCTION PCB A2036B509A [V] A2036B508A [C,A,E,V,B,S,U]

MAIN PCB
A2036A501A [U] A2036A502A [C,A] A2036A503A [E] A2036A504A [V] A2036A505A [B,S]

HEAD PHONE PCB

A2036A501D [U]

A502D [C,A]

A503D [E]

A505D [B,S]

SPEAKER PCB

A2036A501C [U]

A502C [C,A]

A503C [E]

A505C [B,S]

HEAD PHONE PCB A2036A504D [V]

SPEAKER PCB A2036A504C [V]

POWER SW PCB

A2036A501B [U]

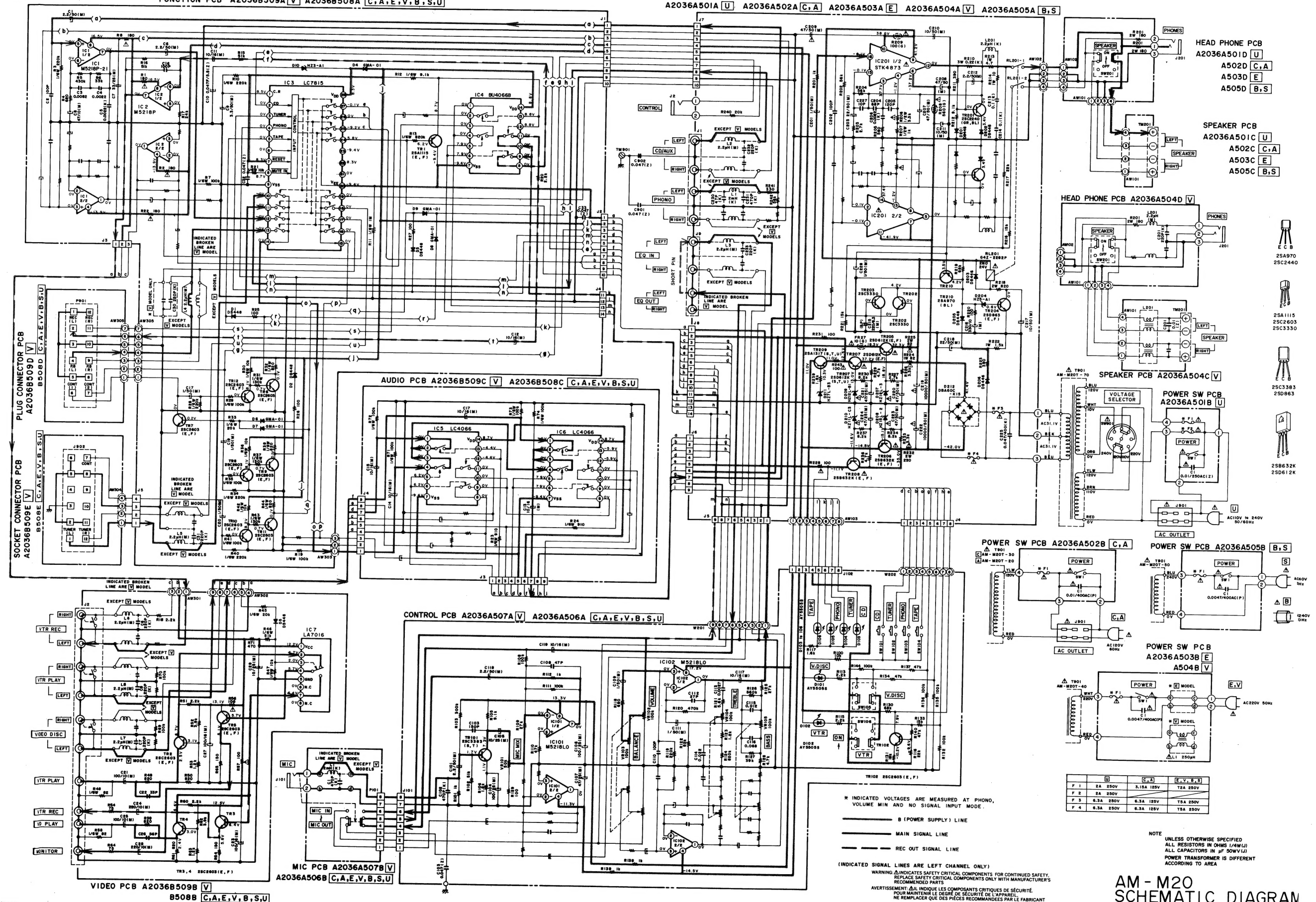
POWER SW PCB A2036A502B [C,A]

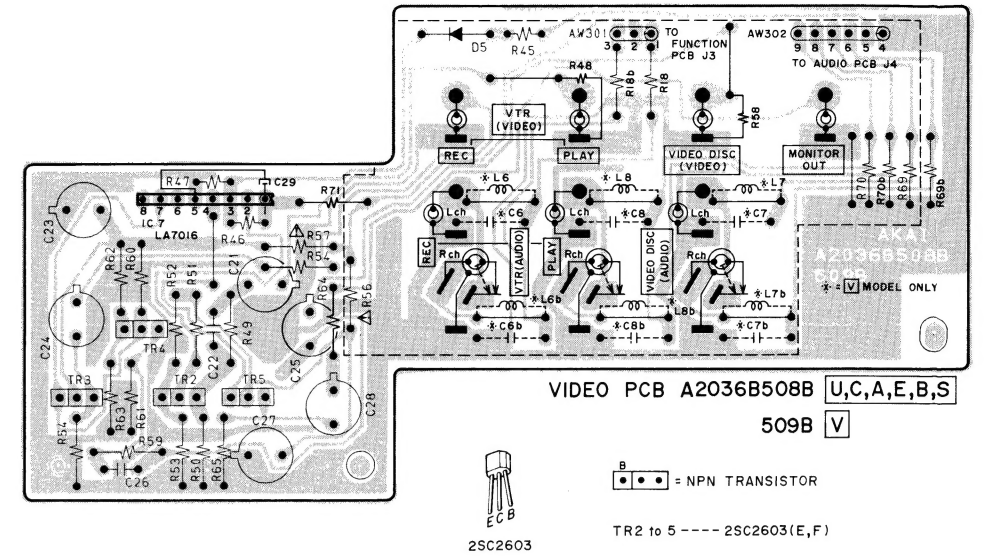
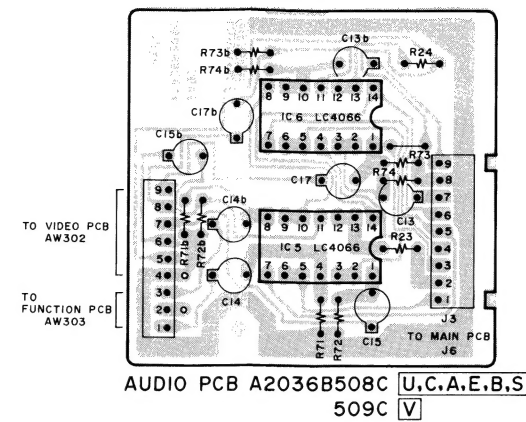
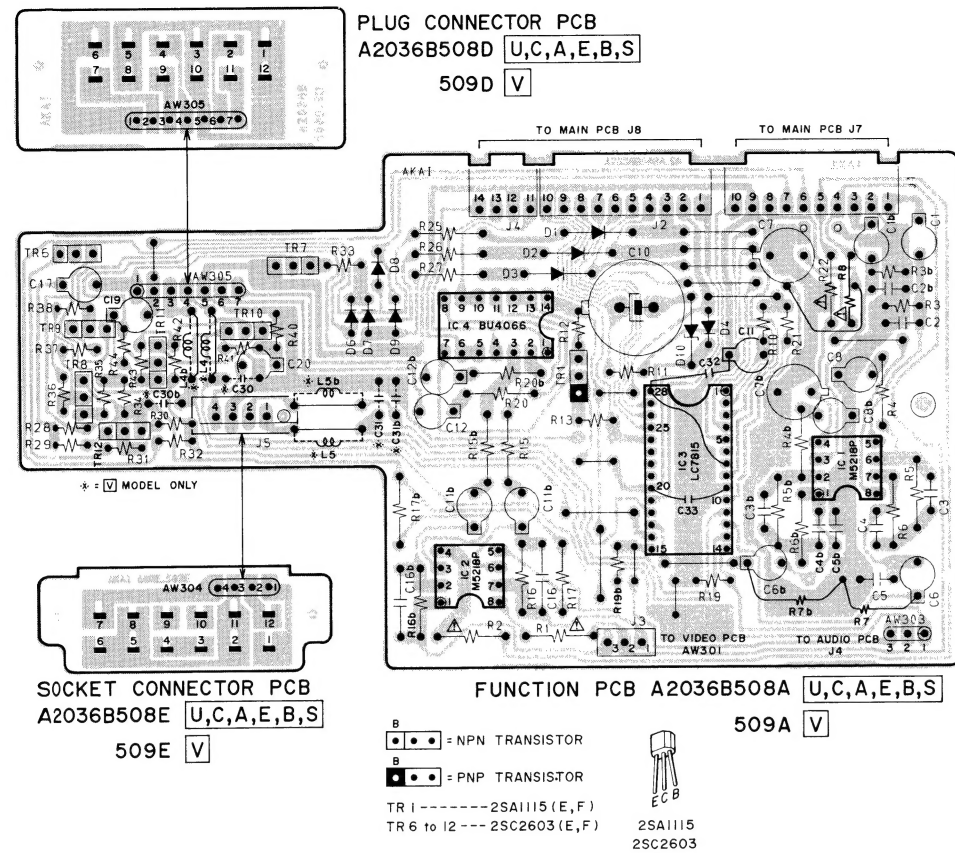
POWER SW PCB A2036A505B [B,S]

POWER SW PCB

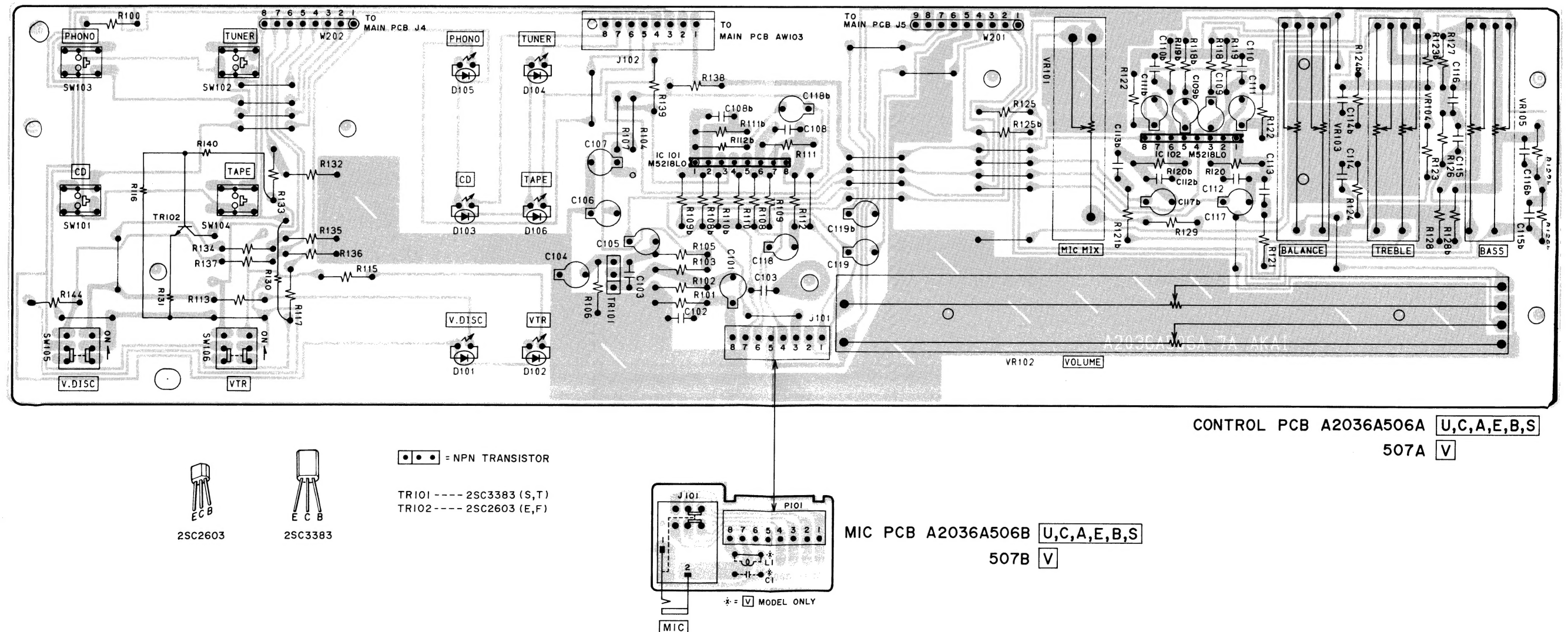
A2036A503B [E]

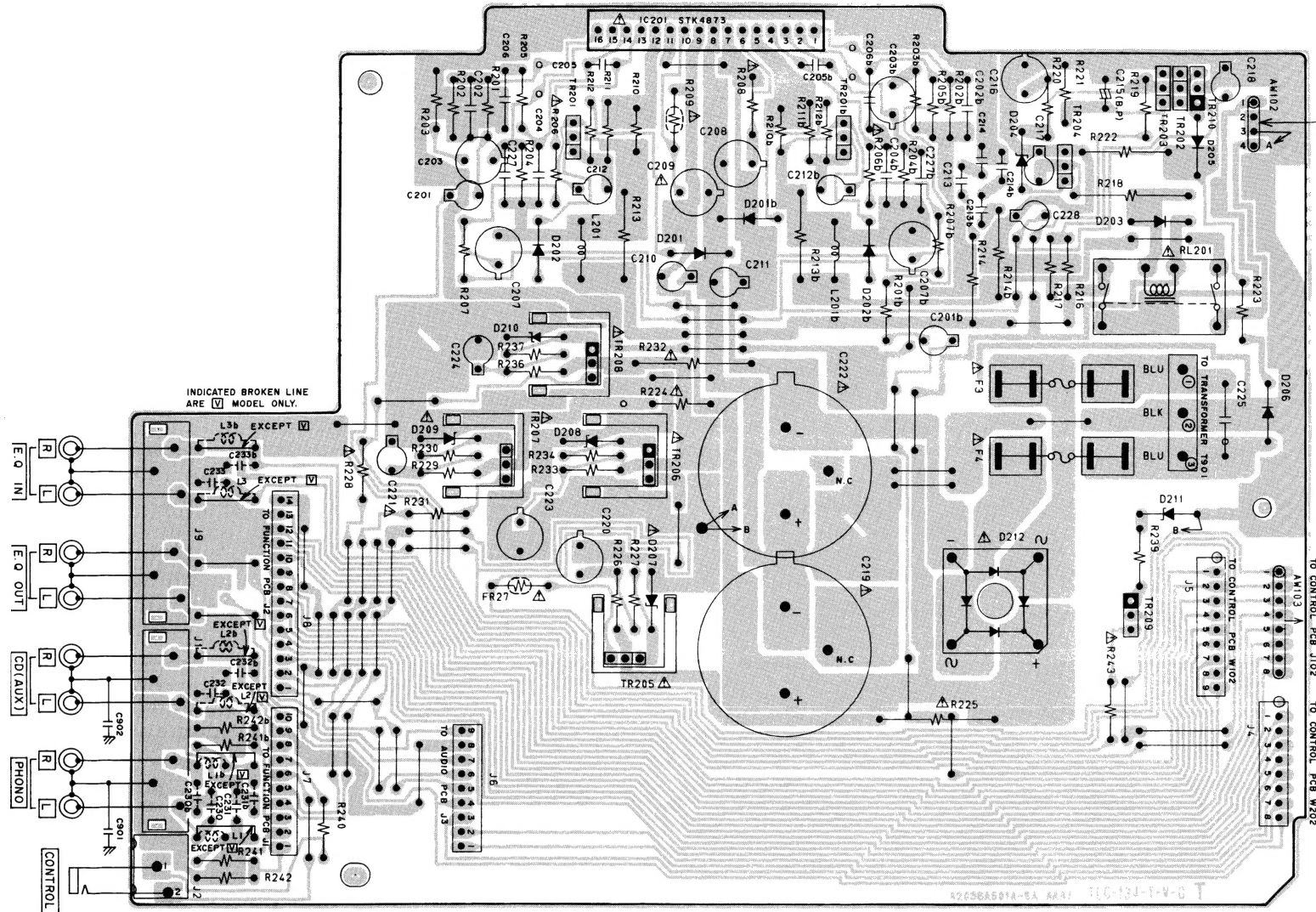
A504B [V]

AM-M20
SCHEMATIC DIAGRAM
NO.850129A



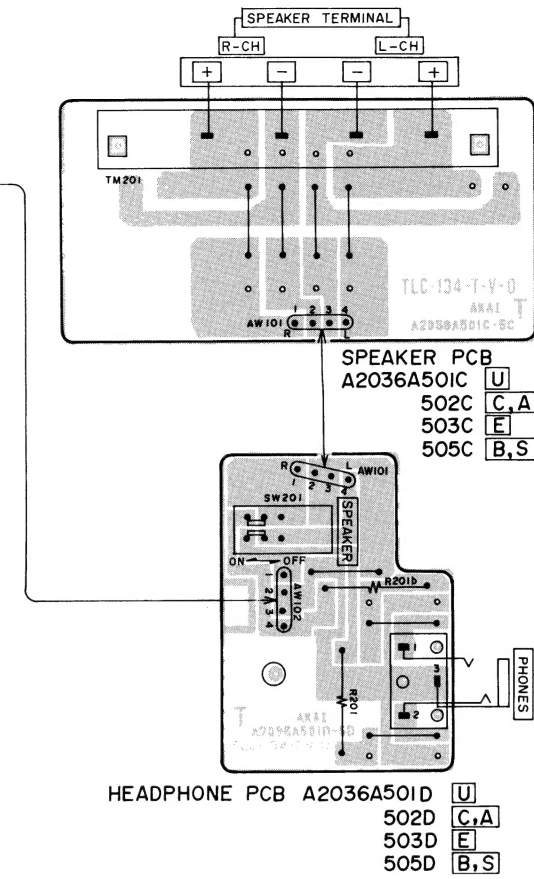
WARNING: Δ INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS.
AVERTISSEMENT: Δ IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE FABRICANT.





MAIN PCB A2036A501A [U]
502A [C,A]
503A [E]
505A [B,S]
504A [V]

WARNING: Δ INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS.
AVERTISSEMENT: Δ IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE FABRICANT



Δ = PNP TRANSISTOR
 \square = NPN TRANSISTOR

TR201, 201b ----- 2SC2440 (GR, BL)
TR202, 203 ----- 2SC3330
TR204 ----- 2SD863 (E, F)
TR205, 207 ----- 2SD612K (E, F)
TR206, 208 ----- 2SB632K (E, F)
TR209 ----- 2SA1317 (S, T, U)
TR210 ----- 2SA970 (BL)

